

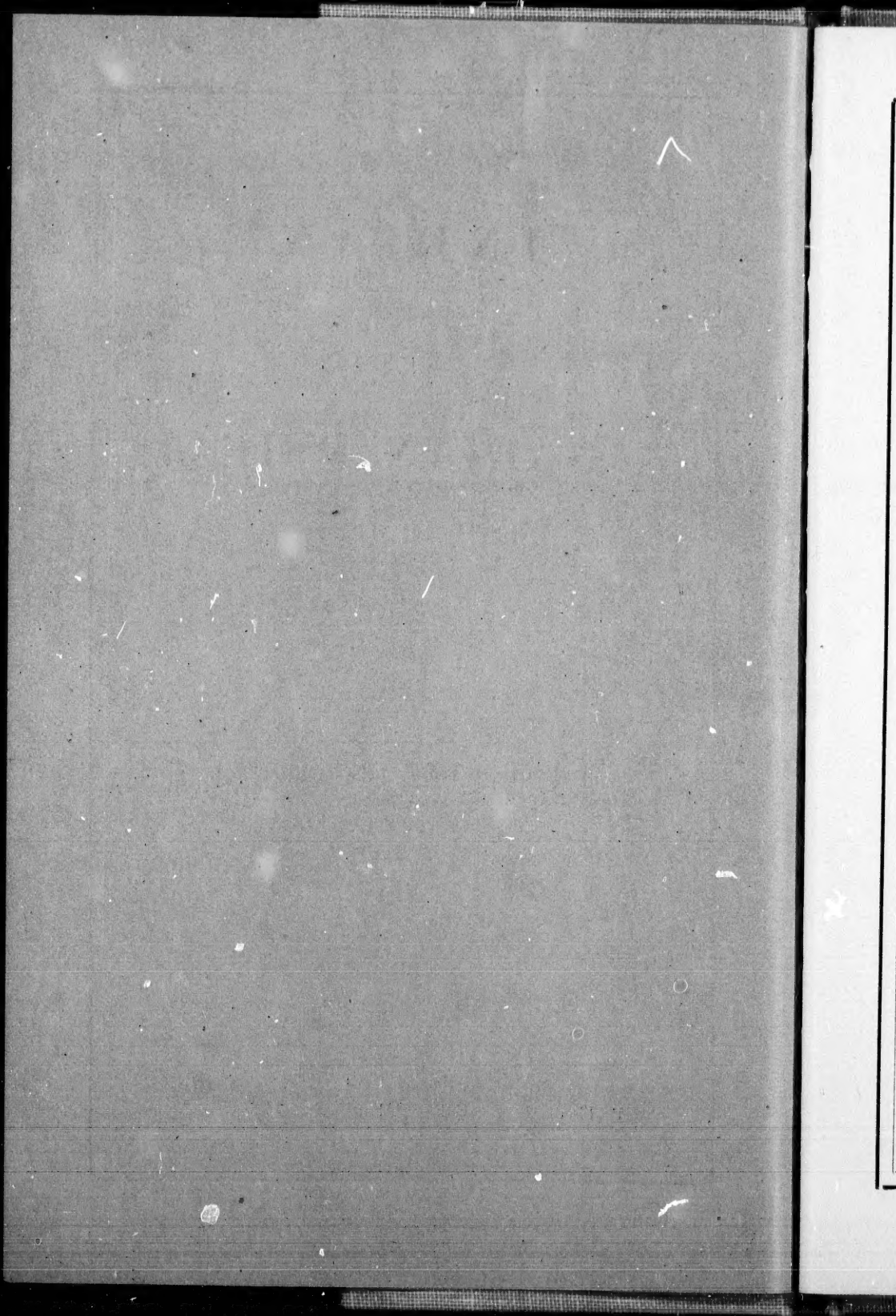
INDIAN

V.

CANADIAN WHEAT.

Reprinted from "The Miller."

LONDON:
PRINTED BY GEORGE BERRIDGE & CO.,
179 & 180, UPPER THAMES STREET, E.C.



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CONTENTS.

	PAGE
INDIAN v. CANADIAN WHEAT	3
ENGLISH MILLERS ON CANADIAN NORTHWEST WHEAT ...	20
THE "MILLER" JOURNAL ON CANADIAN NORTHWEST WHEAT	34

INDIAN *v.* CANADIAN WHEAT.

The following is extracted from the Technical Issues of "THE MILLER," of January 1st, February 2nd, and March 2nd, 1885, an influential Journal published in London, England, and the largest in the world devoted to the Interests of Millers.

FROM A CORRESPONDENT.

We have been favoured with the following paper on a subject of great interest, which we publish in THE MILLER. It is treated from a Canadian point of view, and our readers will as a matter of course draw their own conclusions from the contentions of the writer, who is thoroughly familiar with the subject.

The prevailing idea in England, and to some extent, I understand, in Canada, that India is destined to outstrip the American continent in the production and export of grain, led me to investigate, says the writer, the real facts of the case with the following result :—

India is, indeed, already playing an important part in the food supply of Great Britain, and it is thought by many that ere long Indian wheat will take the place of other foreign grains in the British market. It is supposed that as the area of wheat cultivation increases in India, and railway facilities for its transport to the seaboard become more perfect, the immense quantities thrown under such circumstances upon the British market will so reduce the prices of grain that the American and Canadian producers will be unable to compete, and will, therefore, be obliged to withdraw altogether from the market. Upon this assumption, that the export of wheat from the United States and Canada will be seriously affected, and perhaps destroyed, through the competition of Indian wheat in the British and European markets, it is thought by some that the value of American and Canadian farming lands must necessarily deteriorate in proportion as the production and export of Indian wheat increases. I am not, however, inclined to agree with these views, for it is not at all certain, as many are disposed to think, that India will ever become a reliable source of food supply for Great Britain, or that it will be able to export wheat in such quantities and at such prices as to exclude others from the British market. There are serious drawbacks to be considered in connection with the production of Indian wheat—drawbacks which would, in my opinion, render it suicidal on the part of Great Britain to

depend solely on its Indian dependency for its wheat supply. The very uncertainty of the supply from India will make British millers and bakers hesitate before abandoning the use of and thus driving from the market American and Canadian breadstuffs. I think I shall be able to show that Canada has really little to fear from Indian wheat competition abroad. At the same time, in order to be secure in this position, it is necessary that every care should be taken to bring the standard of Canadian wheat to the highest pitch, so that it may always command the attention of British buyers, no matter how great may be the quantity of Indian grain in the market.

It is calculated that the *per capita* consumption of bread in Great Britain is equal to $5\frac{1}{2}$ bushels of wheat, and this on a population of 35,450,073, made up as follows :—

England and Wales	...	...	...	...	...	25,968,286
Scotland	...	...	...	...	...	3,735,573
Ireland	...	...	...	...	...	5,746,214
						<hr/> 35,450,073

amounts to 200,883,737 bushels. It may be interesting to learn the sources from which Great Britain derived this immense supply during last year, and to what extent India, the United States and Canada bore a part in connection therewith. The following table includes not only wheat, but also flour reckoned as wheat :—

						bushels
United States	...	...	...	...	...	76,833,720
Russia	...	...	...	...	...	24,814,272
India	...	...	...	...	...	20,987,864
Germany	...	...	...	...	...	10,181,296
Australasia	...	...	...	...	...	5,014,344
Canada	...	...	...	...	...	4,530,016
Chili	...	...	...	...	...	4,312,240
Egypt	...	...	...	...	...	2,192,200
Turkey	...	...	...	...	...	2,105,736
Roumania	...	...	...	...	...	754,016
France	...	...	...	...	...	427,472
Countries unspecified	...	...	...	...	...	8,187,480
						<hr/> 160,340,656

leaving 40,543,081 bushels for Great Britain to supply to make up the estimated amount required, viz. : 200,883,737 bushels. But from returns, it appears that Great Britain produced a nett yield of $7\frac{1}{2}$ million quarters, or 60,000,000 bushels during that season, so that, if my figures are correct, there was a surplus in store at the end of 1883 of nearly 20 million bushels. It will be seen from the foregoing tables that the United States stands first on the list of countries supplying Great Britain with breadstuffs; India being third, and that Canada only stands sixth. But there is another feature in these statistics worthy of mention. Of the 76,833,720 bushels of wheat supplied by the United States, 28,177,504 bushels were in the form of flour; of the 4,530,016 supplied by Canada, 1,173,648 bushels were in flour, the only other countries supplying Great

Britain to any extent with flour being Germany and France. It is not the purpose of this paper to compare Canadian wheat with either American or Russian wheats, although incidentally it may be desirable later on to show how Canada may be able in the near future to compete successfully with even these countries. It is with Indian wheat and its probable effect on the value of the Canadian grain that we have more especially to deal at present.

The acreage of the several principal wheat areas in India is as follows:—

Punjab	7,000,000 acres.
North-West Provinces	6,250,000 "
Central Provinces	4,000,000 "
Bombay	1,500,000 "
Behar	850,000 "
Native	5,750,000 "
	25,350,000 "

Of this area there were last year 16,330,632 acres under wheat, while in the same regions there were 15,570,524 acres under rice, and 31,575,492 acres under millets or other food crops. It is estimated that the wheat crop in British India, including some other minor wheat districts, amounts in round numbers to some 240,000,000 bushels, and of this she only exported last season 35,466,666 bushels. Moreover, the exports of wheat from India have varied greatly in amount, as the following figures will show:—

1877-78	12,175,853 bushels.
1878-79	2,170,631 "
1879-80	4,312,118 "
1880-81	14,012,291 "
1881-82	37,135,481 "
1882-83	35,466,666 "

The proportion exported to that produced, it will be observed, is very small, and by a report of a select committee of the British House of Commons, dated 18th July, 1884, on East Indian railway communication, it is apparent that, under any circumstances, the quantity of wheat at all likely to be sent out of the country will not exceed a very small portion of the total produce. This is accounted for by the large amount of grain required to feed the immense population of India itself, and by the necessity for laying in and keeping on hand a reserve stock to guard against famine. In fact the report of the select committee to which I have just referred appears to place more importance on the development of railways in India, as a means by which the centres of food production may be brought into closer contact with the centres of population and the famine tracts, than for the purpose of carrying wheat for export purposes. Some parts of India are always liable to periods of famine, and the wheat producing tracts of country are then taxed to supply the necessary food for the afflicted districts. It is impossible to ascertain the quantity of wheat held in reserve in India against famine, but it is well known to be very large and usually estimated to be sufficient, with other breadstuffs,

for one whole year's consumption, and that it requires from two to three years' accumulated surplus to make up such reserve. The famine question in India is one which it seems to me must necessarily make that country an unreliable source of supply for England to depend upon for breadstuffs.

A very important feature in the production of wheat in India is the necessity for irrigation. The crop requires a great deal of moisture, hence irrigation is of special importance, and various methods are employed for that purpose. The one destined to become a leading factor in the production of wheat is that of canal irrigation, which is now receiving the special attention of the general and local governments, and important works are being carried out and projected for an extensive system of canal irrigation. Thus, of the sum of £2,500,000 authorised to be annually borrowed, the Government of India have ordinarily applied £700,000 each year to irrigation. To give some idea of the extent of some of the irrigation canals in India, I may mention that the Sirhind Canal in the Punjab, which was built mainly by prison labour, is 502 miles long, and will irrigate 780,000 acres through 2,500 miles of minor channels. The cost of irrigation will always be a heavy drag on the production of Indian wheat, and is one of the points in which the Canadian prairies will always have an advantage over India.

It is estimated that the *agricultural* population of India numbers about 260,000,000. The Indian agriculturist—the ryot—is merely a tenant holding a small patch of land, say from 5 to 15 acres, which he cultivates on shares for the landed proprietor or zemindar, who in turn holds the land on rental from the Government. The mode of cultivating the soil is of the rudest description. The land is ploughed by means of a crooked stick, iron pointed, and the harrowing done by an implement resembling a common ladder laid flat on the ground, and dragged by the small bullocks peculiar to the country crossways over the field. The seed is sown by hand, and reaped with a rude sickle. The sheaves are frequently carried home on the back of the farmer, and threshed out with a wooden club, the grain being cleaned by hand winnowing. The use of farm machinery is unknown, and is not likely to be adopted for many years to come, for not only will the system of small farms prevailing in India prevent the introduction of expensive appliances, but the *ryot*, clinging as he does with religious veneration to the old methods used by his forefathers, is very unlikely to change them for new and more improved systems:

This state of things must constitute a serious drawback to the production of wheat in that country, because, under such treatment as I have described, grain cannot possibly be either well cleaned or preserved, and the general complaint which is now made against Indian wheat in regard to its dirty condition is not likely to be removed. In this respect Canadian wheat, owing to the improved methods in force, will always compete favourably with its Indian rival.

Another significant fact is frequently ignored by those who so confidently predict the speedy supremacy of Indian wheat, viz., that the *ryot* in India is so simple in his mode of living, and his wants are so few, that he is inclined to be more independent than were he pressed by urgent claims to sell his produce at any price. As a matter of fact, the *ryot*, while able and willing to sell his wheat at the nearest market place, if not more than a day's journey from his home, for 50 to 60 cents per bushel (will not accept less), and unless he can obtain this price, he will either store it in a hole under ground until a more favourable time shall come, or he and his family will consume it in lieu of other breadstuffs. The export trade of India depends, therefore, on a first price paid the producer of say 50 cents, which means, laid down in London, about \$1.18 per bushel. It will be seen by comparison later on how far Canada has to dread this figure in the London market.

The home of the *ryot* consists of a mud or bamboo hut; his property a pair of small bullocks, a few cows, calves, and goats, a wooden cart, and a few brass and earthen pots, in all worth about £10; and his implements and tools are of the rudest kind, such as his ancestors used a thousand years ago. He has little if any ambition, and occupies very much the same position as the serf lately did in Russia. He is not likely to desire an increase in the size of his small patch of land, as it would simply mean greater labour by him, and its proceeds to be shared with the *zemindar*, the priest, &c.

The total population of British India, including the Native States, was, according to the census of 1881, 252,660,550, and the area in square miles 1,472,423. Of this, as already shown, only 25,350,000 acres are under wheat cultivation, and it is estimated that there are 56,000,000 acres beyond the cultivated wheat area at present jungle, but mostly available for successful wheat growing. Thus the wheat area of India may be calculated at something over 80,000,000 acres. The best average yield is obtained in the Punjab, where it is estimated at 13½ bushels per acre, and in the North-Western Provinces at 11½ bushels. The general average is about 12 bushels per acre, though by high cultivation and use of irrigation and manure, a yield as high as 25 and even 30 bushels per acre has been obtained. Taking the average, however, of 12, and assuming that the whole wheat area was brought under cultivation, it would yield the enormous quantity of 960,000,000 bushels. But if we are to entertain such extravagant figures, and to place our calculation on this basis, it must be remembered that the Canadian North-West alone, taking a low estimate of its wheat producing land, would produce annually 7,500,000,000 bushels. In the North-West, however, as in India, people are required to cultivate the soil before crops of grain are realised, and it must not be forgotten that while railways are being pushed

NOTE.—Although wheat from Canada is little quoted in the British market as Canadian wheat, the receipts are always shown as from British North America, i.e., Canada.

forward in India with astonishing rapidity, the population is not increasing at a rate to justify the expectation that any large area of reclaimed jungle can be utilised for the growth of wheat for many years to come. There is also another feature to retard the rapid development of the uncultivated wheat area in India, namely, the repugnance of the agricultural classes of that country to migrate, whilst white settlers could not stand the climate as tillers of the soil. It is the opinion of many authorities that, under favourable circumstances, the export wheat crop of India might, within a few years, be increased to 75,000,000 bushels, and this is not improbable. But even should this be the case, it is only about one-fourth of the quantity of breadstuffs required by Great Britain alone, and, at the worst, Canada has a fair opportunity to compete for the remaining three-fourths. From diligent enquiry, I am of opinion that, taking all the drawback connected with the production of wheat in India and its export, the worst we have to fear from competition in that quarter is a doubling of the present receipts of Indian wheat in England.

The quality of Indian wheat may be learned from the report of U. S. Consul-General Mattson, of Calcutta, to whom I am indebted for much valuable information on several points in the preparation of this paper. Mr. Mattson divides the different varieties into four principal groups, viz.:

1st. The soft white wheat, of a bright, straw colour, and a white, floury fracture. This variety is most suitable for the London market, and is in great demand by English millers, on account of its dryness, to mix with the moist English wheat.

2nd. The hard, white wheat, with a brittle grain, of a flinty or ricey appearance. This brings a higher price in Italy, for the manufacture of macaroni, than in London.

3rd. The soft red wheat, which differs from the soft white only by the reddish colour of the skin and a smaller grain. It is also very suitable for the English market.

4th. The hard red wheat, which is of a dark brown colour, translucent in appearance, with a smooth and glass-like fracture. It stands lowest in the London market.

Mr. Mattson compares the quality and value of Indian with American wheat, by English standard, as follows:—Select lots of the first group have been found equal to the best Californian and Oregon, but the average best grade is between No. 1 and No. 2 Milwaukee (*an estimate which I deem too high when the prices obtained in the London market are considered*), and the relative values of the four Indian groups are as follows:—

Second group	...	...	5 cents per bushel less than first.
Third group	...	...	5 cents " " less than second.
Fourth group	...	...	5 cents " " less than third.

It may be interesting, in view of this comparison, to note the prices paid during twelve months for various grades of wheat in the London market, and for this purpose I will take the year 1882-3:—

TABLE A.—PRICES IN LONDON FROM MARCH, 1882, TO FEBRUARY, 1883, INCLUSIVE.

DESCRIPTION.	March.	April.	May.	June.	July.	August.	Sept.	October.	Nov.	Dec.	January.	Feb.
	shillings	shillings	shillings	shillings.	shillings	shillings.	shillings	shillings	shillings	shillings	shillings	shillings
Milwaukee, No. 1 ...	53 to 55	53 to 55	53 to 55	None.	None.	None	None.	None.	None.	None.	None.	None
" No. 2 ...	51 " 54	52 " 55	52 " 55	"	"	"	"	"	"	"	"	"
American. No. 1 Spring	None.	None.	None	"	"	"	"	"	"	"	"	"
" No. 2 "	51 to 53	51 to 53	51 to 53	50 to 51	50 to 52	51 to 53	48 to 45	49 to 43	41 to 44	41 to 44	41 to 44	44 to 46
" Red Winter	51 " 54	52 " 55	53 " 55	51 " 54	51 " 53	51 " 53	48 " 49	41 " 43	43 " 45	43 " 46	43 " 46	47 " 49
Californian ...	49 " 53	51 " 53	52 " 53	50 " 52	50 " 52	50 " 52	48 " 49	46 " 48	47 " 48	47 " 48	46 " 48	48 " 49
Oregon ...	50 " 54	51 " 54	51 " 54	51 " 53	51 " 53	51 " 52	48 " 49	47 " 48	47 " 49	47 " 49	47 " 49	48 " 49
Canadian White	50 " 54	50 " 54	50 " 54	50 " 53	50 " 53	51 " 52	48 " 48	44 " 46	44 " 47	44 " 47	44 " 47	45 " 47
Bombay Red ..	38 " 48	38 " 48	33 " 50	39 " 48	39 " 48	40 " 48	40 " 45	40 " 43	40 " 45	40 " 45	40 " 45	40 " 46
" White ..	46 " 50	46 " 50	46 " 50	44 " 48	44 " 48	46 " 50	42 " 47	42 " 46	42 " 46	42 " 46	42 " 46	43 " 47
Calcutta White ..	44 " 46	45 " 46	45 " 46	44 " 47	44 " 47	45 " 49	42 " 45	38 " 42	39 " 43	39 " 43	38 " 42	38 " 44
" Red ...	40 " 44	40 " 44	41 " 44	40 " 44	40 " 44	42 " 43	40 " 41	36 " 42	38 " 42	38 " 42	38 " 41	38 " 44

During the above period of twelve months the highest and lowest prices of the different varieties were as follows :—

	Highest.	Lowest.
	shillings.	shillings.
American Milwaukee No. 1...	55	53
" " No. 2 ..	55	51
" No. 1 Spring	None	None
" Red Winter	55	41
" No. 2 Spring	53	40
Californian	53	46
Oregon	54	47
Canadian White	54	44
Bombay Red	50	38
" White	50	42
Calcutta White	49	38
" Red	46	36

It will be seen from the above that Indian wheats rank lowest in the market, and that American Milwaukee commands the highest price. Canadian white wheat stands about equal with American red winter, Oregon, and No. 2 spring, and higher than Californian. American No. 1 spring was unknown in the London market for twelve months. It is also noticeable that Canadian spring wheat is not quoted, and, in fact, it is almost unknown, having until lately been included with American. I should like to say here that every effort should be made to introduce the hard red Fyfe wheat of the Canadian Northwest into the British market, and that in doing so, care should be taken to ship only the best and purest and best cleaned grain of that variety, in order to give it a distinctive character in the home market. If this is done, and care is taken to keep the grade up to the market, I have the highest authority for stating that it will command both a high price and ready sale amongst the millers of Great Britain, for the purpose of mixing with English and other grains having more moisture, in order to improve the quality of the flour.

It is of the utmost importance, however, that Canadian Northwestern hard Fyfe wheat should receive a special quotation in the British market, in order that its good qualities may be properly distinguished and appreciated. Hitherto Canadian wheat, known as the produce of Canada, has borne but a small part in the wheat trade of Great Britain, and it is time that the Dominion, with her millions of acres of wheat land being developed, should waken up to this fact and assume her proper position in the wheat markets of the world.

Last year, Messrs. McDougall Bros., of 10, Mark-lane, London, made a report on Indian wheat for the Secretary of State for India, which was presented to both Houses of Parliament. In this report there is no mention made of Canadian wheat, although I am certain that in some of the characteristics of Indian wheat spoken so favourably of, the hard red Fyfe wheat of the Canadian Northwest would have been found to excel, especially as regards its flour producing and bread making qualities. In

addition, it would have been found, I venture to say, even more valuable than the Indian wheat on the point of dryness for admixture with English wheats. An article by Mr. J. H. Norman in the *Chamber of Commerce Journal* of 5th July, 1884, thus deals with the report of Messrs. McDougall Bros.

"We pronounce them (Indian wheats) to be exceedingly useful wheats, "in fact hardly equalled for what is deficient and wanting in the "English markets by any other wheats. Their chief characteristics are "just those in which the wheats grown in our variable climate are most "deficient. Their great dryness and soundness renders them invaluable "for admixture with English wheats that are in any degree out of condi- "tion through moisture, and the great proportions of the wheat harvested "here have been in that condition for some years past, a condition that "must prevail in all other than that of wheats harvested and stored "during fine and favourable weather; and this the English farmer knows, "greatly to his cost, is a state of climate that is by a long way the excep- "tion rather than the rule. Added to their dryness, the thinness of the "skins and consequent greatness of the yield of flour, must always place "them in the front rank as a 'miller's' wheat, whenever they are "handled with reasonable intelligence and skill."

"Such unprecedented yield of flour, as shown by these wheats, ranging " (by ordinary grinding) from 77.46 to 80.52 per cent. against English "65.2* and American spring 72.2, speaks volumes in their favour, and "their value is still further increased by another point of merit of almost "equal importance, viz., a larger percentage of bread may be obtained "than from any other of the flours included in this review."

Mr. Norman, however, in dealing with this report, neglects to give the character of the bread produced from the Indian wheats.

The remark of Messrs. McDougall Bros. in this respect are in four cases, "*Loaf small and rather dense*," in two cases the words "*texture more elastic*" were added, and in two other cases the loaves were found to be "*too ricey*." In all the other cases, of bread from other wheats, with the exception of that from Egypt, which was found to possess no good points, the samples of bread produced were more or less well spoken of. Now, it is exactly in its quality as a flour producing wheat, and in the excellence of the flour produced, that I believe the hard red Fyfe wheat of the Canadian Northwest will always be found to hold its own in the British market, although up to now it is unknown to millers in Great Britain.

A prevailing idea in England is that, with increased railway facilities, India will be able to pour such immense quantities of wheat into the British market that other foreign grain will be completely swamped. I have, however, shown, that when the capabilities of India and all the circum-

* The sample of English wheat referred to in the report of Messrs. McDougall Bros. contained an excess of moisture. See report in *THE MILLER*, June 4, 1883, vol. ix., page 284.—ED. MILLER.

stances attending the production of wheat in that country are considered, it is not at all too certain that India will ever be able to swamp the British grain market in this way. But if it is a mere question of capability of production, we have only to turn to the Canadian Northwest, with its millions of acres of undeveloped wheat lands, to dispose of the superiority of India in that respect. In my opinion, however, quality is to be considered as much if not more than quantity, and if this view is correct I am quite certain Canada will always be able to hold its own with India. The next point is the comparative cost of production and transportation to the British market. The greater portion of the wheat exported from India goes through steamers *via* Suez Canal, and the time required for transit to London is:—From Calcutta, 35 to 40 days; from Bombay, 28 to 33 days; and from Kurrachee, 30 to 35 days. While on the subject of transportation, it may be well to call attention to another drawback to which Indian wheat is liable. It seems that while the wheat is exposed to the air during inland transit and storage at the seaport, it is very frequently damaged by an insect (the weevil) which germinates in the grain itself under the influence of heat, a fact which tells against the use of elevators or large warehouses in the interior of India as in America and Canada, and which explains why the *ryot* adopts the plan of storing his stock of wheat under ground. Indeed there are no facilities inland for shipping in bulk, the grain being put in bags, handled and carted by manual labour, and it is doubtful, considering the climate and danger of attack from the weevil while being stored, whether any means of inland storage, on a large scale, can be adopted in India. On the other hand, in Canada the system of elevators and warehouses is of immense value.

I am again indebted to Mr. Mattson for the following figures, showing the cost of transportation from the place of production to the London market:

Inland—

Punjab to Kurrachee	...	...	800 miles	...	25c. per bush.
Northwestern Provinces to Calcutta	700	"	...	18	" "
Central Provinces to Bombay	...	460	"	...	16 " "

Seaboard to London—

Calcutta to London	...	...	...	...	30 cents per bushel.
Kurrachee to London	...	...	...	...	25 " "
Bombay to London	...	...	...	...	25 " "

To the above must be added the charges of the middlemen; cost of bagging, shipping commission and insurance, in all about 18 cents per bushel. Efforts are being made to reduce these charges to a minimum, but as they include insurance, commission, and handling, the reduction cannot be a very important one.

Taking then the lowest price which the *ryot* is likely to accept for his grain, 50 cents, we may reasonably assume that Indian wheat will cost, on an average, from \$1.15 to \$1.20 per bushel in London, or from 38s. 1d. to 39s. 8d. per qr.

If the farmers of the Canadian Northwest were to sell their grain at

50 cents, it could be laid down in England at the present time for about 89 cents per bushel, as follows:—

First cost	...	...	...	...	...	...	...	...	\$0.50
Freight to Montreal by C. P. R.	...	...	...	...	...	...	...	...	0.25
Elevating charges, &c., say	...	...	...	...	...	...	...	...	0.10
Ocean freight	...	...	...	...	...	...	...	...	0.04
									<hr/>
									\$0.89

But in order to be as nearly correct as possible, and to provide for an increase in the ocean freight rates, we will take an outside limit of, say, 7 cents, which would bring up the cost of Canadian Northwestern wheat in England to 92 cents per bushel. We will suppose, however, that the farmer of the Canadian Northwest obtains 75 cents for his wheat, this would bring the cost in London as follows:—

First cost	...	...	...	...	...	...	...	...	\$0.75
Freight to Montreal	...	...	...	...	...	...	...	...	0.25
Elevator charges, &c.	...	...	...	...	...	...	...	...	0.10
Ocean freight	...	...	...	...	...	...	...	...	0.7
									<hr/>
									\$0.97

or about 32s. per qr., or 8s. less than the very lowest price paid in the London market during twelve months for American No. 2 spring, and 4s. less than the lowest price paid for the poorest grade of Indian wheat. In other words, the farmer of the Canadian Northwest is in a position, on account of his closer proximity to the English market and low cost of transportation, to obtain a home price 50 per cent. higher than the *ryot* of India, and still compete with the latter at less figures in Great Britain. Now, I feel justified in saying that hard red Fyfe wheat from the Canadian Northwest, if pure and well cleaned, will fetch at least 10s. per quarter more in the British market than Indian wheat, ill cleaned as the latter is likely to be. Or supposing Indian wheat to be well cleaned, I feel sure, from opinions expressed to me by British millers, that the wheat of the Northwest will always command a price equal to the very best sample of its Indian competitor, and I think I have shown very conclusively that India can never compete successfully with Canada, so far as the cost laid down in London is concerned.

Then there is another point of great importance, viz., the yield per acre in the respective countries. The average, as I have already shown, is 12 bushels to the acre in India. The average in the Canadian Northwest is from 25 to 26, or more than double that of India. One hundred acres under cultivation is no uncommon thing with the Canadian farmer, while the *ryot* is content with from 5 to 15 acres; in fact, it is doubtful whether his ambition or means of cultivation would allow him to extend his farming operations beyond this extent. In other words, a farmer and his family in Canada will cultivate the same quantity of land that it will take from 15 to 20 farmers and their families to cultivate in India. The simplicity of the *ryot's* mode of life, his few and inexpensive wants, are ever brought forward as an argument in favour of the low cost of wheat production in India; but if the following figures are noted, it will be

seen that there are other considerations to be taken into account. Allowing to the farmer of the Canadian Northwest 100 acres under cultivation (not at all unusual), this would produce, taking say 24 bushels to the acre, if all under wheat, 2,400 bushels at the lowest calculation. To produce the same quantity of wheat in India, giving to each *ryot* an average of 10 acres with a yield of 12 bushels per acre, it would take just 20 *ryots* in India to produce what one farmer can do with ease in the Canadian Northwest. Or, in other words, it is possible for 100,000 farmers in the Canadian Northwest to produce annually as much wheat as the total production of India amounts to at the present time. It is only necessary to double the number of Canadian Northwestern farmers mentioned, and to consider what it means in the way of wheat production, to see the utter fallacy of supposing that India will ever be in a position to eclipse a country like Canada in production and export of grain.

The extent of valuable agricultural land in the Canadian Northwest proper is estimated at 600,000 square miles, or 384,000,000 acres; and of this, nearly 240,000,000 acres comprise the wheat area. This vast extent of land, however, does not constitute the whole wheat area of the Canadian territories, the district beyond the Saskatchewan, in the valley of the Athabaska, and along the Peace River westward to the Rocky Mountains, being said to contain about 300,000,000 acres suitable for wheat culture. It is, in fact, difficult to state with any certainty the extent of the wheat area in the Northwest, as it is being discovered from time to time that districts supposed to be unfit for wheat culture are well adapted to the growth of that cereal. Take, however, a general estimate of 300,000,000 acres (certainly not above the mark), and suppose that vast area under wheat, it would give over 7,000,000,000 bushels. There is the same absurdity in a supposition of this kind as in that put forward on behalf of India, that the extent of the wheat area in that country is so vast and its capabilities of production so great, that it is destined to eclipse all other lands in the wheat markets. The density of the population in India, with its famine tracts, will always cause a heavy drain on its wheat supply for home consumption. There will never be this drawback in the Canadian Northwest, simply because the area capable of sustaining population is so vast that settlers will never be content with small holdings, and this feature indicates that, as population increases, so will the surplus supply of wheat for export purposes increase in proportion.

To give some idea of the extent to which the population of the Canadian Northwest may reach, it has been computed, according to Mr. W. J. Patterson, of the Montreal Board of Trade, that there would be plenty of room in the 600,000 square miles first mentioned for 120,000,000 inhabitants, or about the combined populations of Germany, France, Italy, and Spain in the year 1871.

The object of this paper is not, however, to advance improbable calculations, but to deal with practical facts. It is not an improbable

calculation that 100,000 farmers in the Northwest are able to produce a quantity of wheat equal to the whole annual production of India at the present time. Nor is it an improbable calculation that within the next ten years there will be that quantity of wheat to export from the Canadian Northwest. Instead of there being a lack of freight for the Canadian Pacific Railway, as some of those inimical to Canadian enterprise are fond of stating, there is much more likelihood of the Canadian Pacific Railway being unable to handle the traffic. But for Canada to hold its own in the grain markets of the world, it must ever be borne in mind that all those interested in the trade should endeavour to raise the standard of Canadian wheat to the highest pitch, in order that a continuous demand and good prices may be obtained. By a glance at the table marked A, it will be seen that the better qualities of American wheat seem to have been exported to a limited extent by the United States to Great Britain, and that American No. 1 spring, as distinguished from Milwaukee No. 1, did not, during twelve months, find its way to the latter market. This is a mistake into which I would not like to see Canada fall, rather would I like to see the worst grades of wheat used in Canada and the best exported. It should be remembered that Canada is essentially a grain producing and grain trading country, but the production and trading requires cultivation. If a grocer eats all the best raisins in his shop, and sells the worst, it is highly probable that his trade will soon go to pieces. In fact, it is partly the purpose of this paper to urge on Canadians the necessity for paying the strictest attention to the quality of the wheat exported. My desire is to see Canadian wheat in the front rank, so that no matter whether wheat imports be large or small in the European markets, Canadian wheat will be always in demand with millers. Let the standard of Canadian wheat be once established in the front rank, and Canada need have no fear, nor will her farmers have cause to complain of the prices they will receive for their produce. And here let me say that the whole secret of such a triumph for Canada, rests in the first place with the farmers themselves. If they sow only pure seed, and clean and store it carefully when harvested; in the second place with the dealers, if they will bid the highest possible price for such wheat, to encourage its production. It rests with exporters to see that Canadian wheats are better characterised and kept more distinct in the quotations of foreign markets and not so much identified with American productions as they have been. Canadian productions, in my opinion, only require to be recognised in the British market to be appreciated; and in proof of this I append an extract from a letter received by me from one of the highest authorities on the subject in Great Britain: "You are certainly quite correct with reference to Manitoba spring wheat; there is no doubt that the flour produced from Manitoba spring wheat improves the strength and quality of our English flours. I believe that hard red Eyre wheat of good quality

"produced in Manitoba will always command a ready sale in this country. I am under great obligation to the Deputy Minister of Agriculture for the Province of Manitoba for sending me various samples of wheat grown in different districts of that colony, and I may say that I have never seen any samples of wheat offered for sale in any of the English corn exchanges equal to the red Fyfe wheat sent by that gentleman."

I cannot but look on the Canadian Northwest as destined to be the great wheat producing land *par excellence* of the world, owing to its immense area, its wonderfully fertile soil, and the undoubted excellence of its grain. In confirmation of the latter, I may mention that the millers of Minneapolis regard the hard floury grain of the Canadian Northwest so highly that a large quantity of Manitoba wheat has already found its way to Minnesota for seed purposes to improve the quality of the grain in that State, which is acknowledged to be the banner wheat State of the Union. The home consumption of the United States is becoming larger every year, while its wheat area is becoming more limited owing to the increase in maize production and from other causes. Take for instance Illinois, which not long ago was devoted to wheat raising, but is now almost altogether a corn or maize State. Then again the rapid increase of population in the cities and towns of the United States, the increased demand for breadstuffs in the Southern and Eastern States, and the continual decrease in the yield of wheat in many parts of the country, must tend to further diminish the quantity of wheat in the United States available for export. Canada is not likely to be affected in this manner, owing to the immensity of its western or wheat area as compared with its eastern provinces, and also because it is improbable that maize or other crops will take the place of wheat, when the latter can be grown to such perfection in districts better adapted to its cultivation than any other product. Canada, under these circumstances, has little to fear from the United States, and must, in my opinion, overhaul it year by year in the export of wheat. The perfection to which agricultural machinery is attaining, and which is being taken full advantage of by Canadian farmers, will, without doubt, tend to lessen the cost of production, and in this Canada will always enjoy a superiority over India, where the *ryot's* rude mode of agriculture is likely to prevail for years to come.

I have confined my remarks in this paper solely to the production of wheat. There are other industries in connection with the land of the Northwest, as, for instance, stock raising and the growth of other cereals, such as oats, barley, flax, &c., which I have not touched upon, but which will exert a great influence on the trade of Canada and in the value of our Northwestern territories. It may be interesting to give a few facts in connection with wheat production in the Canadian Northwest, and their bearing on the success of the railways traversing the country. Allowing 600 bushels of wheat to a car-load, and 20 cars to an ordinary freight train, it will take five farmers, each 100 acres under wheat, to supply such

a freight train; or allowing only half the land under wheat, it would raise the necessary number to ten farmers. Taking, therefore, an average of ten farmers to an ordinary train, 100,000 farmers would be able to supply 200,000 car loads of wheat, equal to about 32 trains a day for twelve months, leaving out Sundays. This would mean more than double what any one line of railway can comfortably do with a single track, leaving out of the question all other descriptions of freight, which only goes to prove what I said in the previous part of this paper, that it is much more likely that in a few years the Canadian Pacific Railway will be unable to handle the freight offering, instead of not having sufficient to carry. My paper has, however, spun out its length much longer than I intended, and I am therefore unable to go into further details; but I think I have shown enough to satisfy the most confirmed sceptic—first, that Canada has no reason to feel any dread of Indian wheat competition in the European markets; second, that instead of the lands of the Northwest deteriorating in value they are likely to become more and more valuable as settlement progresses and the export in wheat increases; and thirdly, that the railway carrying trade of the Canadian Northwest is much more likely to outstrip the railway than the railway the carrying trade. Last year the surplus wheat of the Canadian Northwest amounted to two million bushels; this year it is estimated at over seven millions. If the same ratio of increase holds good next year, the surplus will amount to from 15 to 20 millions, and at this rate of increase the Canadian Pacific Railway in less than three years will have more wheat to carry than it is able to handle. The great point, however, in my opinion, is for Canadian producers and exporters to pay particular attention to the quality and condition of the wheat exported; and if this is done, and Canadian wheats are fully recognised on their merits in foreign markets, there is no fear but that Canada will hold her own against all comers.

Those who have followed the remarks and figures already brought forward in these columns under the above head cannot but have read with much gratification the high opinions expressed by millers last month upon the No. 1 hard wheat of the Canadian Northwest, with which the growth of India and other countries would have to compete. Thanks to the energy and enterprise of THE MILLER, an essential step has been taken towards the introduction of this valuable grain to the British markets, and if one thing more than another must be evident to all, it is that when so introduced the No. 1 hard Fyfe wheat will be in extensive demand. It fills, indeed, a much felt want; its dry, hard qualities making it almost invaluable in replacing the home-grown wheats, which too frequently enter the mill in a damp and unsatisfactory condition. For these desirable features and the strength and colour of Canadian Northwestern wheat, which make it so suitable to the roller and so valuable for admixture with English and other softer varieties, the clear and less humid air of the Northwest must in a large measure be thanked, though some of its characteristics are also doubtless due to the nature of the soil.

Seeing, then, the favourable reception that is assured to this wheat among English millers, it is interesting to note the steps that are being taken in Canada to permit of its export shipment in adequate quantities. Readers of the columns of *THE MILLER* are already aware of the existence of a wheat syndicate in British North America, whose representative has of late spent much time in the purchase of grain from leading farmers in the Canadian Northwest; and latest reports would go to show that while paying a figure remunerative to the grower, the syndicate have secured considerable quantities at such a price as should recoup them with good interest. The grain thus collected has been, or is now being, stored at Port Arthur, ready for shipment eastwards entirely through Canadian territory to Montreal on the opening of navigation at the beginning of May. And of the integrity of the grades of wheat thus shipped there can be no doubt, for the Canadian Pacific Railway Company, owning as it does a continuous line from the wheat fields in the Canadian Northwest to the port of Montreal, will have the grain practically within its own control from the time it is loaded into the cars at the "shipping" station until it is spouted into the holds of the steamships at Montreal; for the railway company, it must be remembered, control the transferring and shipping elevators at the port, as well as the railway and lake steamers. The facilities offered in this respect are certainly unequalled in any other part of Canada, if not America, embracing as they do immense elevators and wharves, with the latest methods in operation. From the railway cars which run alongside, the grain is spouted into the elevators, and thence again direct into the holds of the ocean steamers lodged in the wharf below. There is thus no possibility of mixture, either *en route* or in transshipment with Chicago, Milwaukee, and other classes of grain; and English millers will this season, for the first time, be enabled to obtain the No. 1 hard Fyfe variety at first hand from Montreal, having come to that port direct from the fields of the Northwest.

As to rates of transport eastward from the places of growth, it should always be borne in mind that it is to the true interest of the Canadian Pacific Railway Company to encourage the stability and extension of growth by a permanence of low rates. This policy has hitherto characterised the action of the Company in a marked degree; for proof of which it is but necessary to recall the shipment of grain throughout last season from Winnipeg to Montreal, a distance of some 1,440 miles, for the almost unprecedentedly low rate of 25 cents, or 1s. per bushel. Then, again, the rapid extension of the use of machinery among farmers in the Northwest is an important factor, indicating as it does a continued economising of the cost of production, thus bringing farmers fair returns while enabling their produce better to compete with success in British markets. This extended use of machinery is indeed but one of the signs of the improved methods of production which every season sees more generally adopted on the prairie.

The increased marketing facilities completed in the past year are also

worthy of note. Two immense elevators have been built by the Canadian Pacific Railway—one at Fort William, holding 320,000 bushels, and the other at Port Arthur, with a capacity of over one million bushels. Other elevators have been erected along the line of railway as follows: Manitou, 40,000 bushels; Morden, 55,000 bushels; Morris, 55,000; and Moosomin, 45,000 bushels; all by the Ogilvie Milling Company. Emerson, 27,000 bushels, by James Thompson; Gretna, 26,000, by McBean Bros.; Morris, 20,000 bushels, also by McBean Bros.; Manitou, 30,000 bushels, by the Farmers' Elevator Company; Carberry, 40,000 bushels, by James McKay; Griswold, 30,000 bushels, by the Farmers' Elevator Company; Virden, 20,000 bushels, by McBean Bros.; Indian Head, 50,000 bushels, by the Bell Farm Company. There are, of course, many other elevators at different points along the line of the Canadian Pacific Railway, which were built previously to last year.

With a fertile soil and exceptional facilities for economic production such as he possesses, rates of transport lower than are enjoyed in almost any other part of the world, and the power to produce an article so highly esteemed in our own markets, surely the farmer of the Canadian Northwest can have nothing to fear from competition here or in any other country with the growth of India, and, indeed, of Europe and America generally.



CANADIAN NORTHWEST

No. 1 HARD FYFE WHEAT.

Many of our readers are aware that we have for some time called special attention to the superiority of the hard Fyfe wheat grown in the Canadian Northwest provinces. For the past two or three years we have occasionally received samples of this variety of wheat from the Deputy Minister of Agriculture for the province of Manitoba, which we have distributed among several of the leading millers of the United Kingdom, intimating also to the trade generally that samples could be had at the office of THE MILLER on application. The appreciation by all members of the trade of the superior quality of the wheat was unmistakeable, and a unanimous desire was expressed to obtain such wheat in its purity in the corn markets of this country. During the past year an increased area was sown with this wheat in the Canadian Northwest, and in consequence of the rapid completion of the Canadian Pacific Railway through that territory large stocks of this variety of wheat have been drawn from the vast wheat fields extending 860 miles west of Winnipeg along the line of railway. It is expected that these accumulated stocks will be available for shipment from Port Arthur and Montreal in the spring of the present year, *through Canadian territory only*, thus ensuring the exceptional advantage of direct shipment to this country.

In the hope of securing a portion of this splendid wheat for the millers of the United Kingdom, and to indicate a line of action that may be a further means of successfully meeting the severe foreign competition in flour, we have accepted from another Canadian source a much larger quantity of this magnificent wheat, and have forwarded over one hundred samples to prominent millers selected from the published list of members of the National Association of British and Irish Millers, accompanied with the following circular:—

Office of "The Miller,"

24, Mark Lane, London, E.C., Jan., 1885.

Dear Sir,—I have sent you by accompanying Parcels Post sample bag of last season's wheat grown in the Canadian Northwest, of the No. 1 hard Fyfe variety, as a specimen sample only of Colonial produce.

You will acknowledge the great importance to English millers and dealers of a good mixing wheat, and it is in the hope of bringing about an introduction of this No. 1 hard grade to the English markets, that I venture to ask you to kindly examine the accompanying sample, and oblige me with your written opinion of its value for mixing purposes to the millers of this country, in order to improve the quality of their flour.

Thanking you in advance for your kind consideration of this matter,—
I am, yours faithfully,

WILLIAM DUNHAM.

With the permission of the writers we have been enabled to publish a number of these very important replies in the form they have reached us, which we subjoin. The letters of acknowledgment of the receipt of the samples contain valuable opinions of the wheat in question by some of the most eminent members of the trade; and feeling it important that such opinions should be known to the Canadian farmers, we requested the favour of being allowed to publish the letters in THE MILLER of to-day by another circular, of which the following is a copy:—

24, Mark Lane, London, E.C., Jan. 20th, 1885.

CANADIAN NORTHWEST WHEAT.

Dear Sir,—I beg to thank you for your kind reply to my circular of the 12th current, and for your valuable opinion as to the quality of the sample of Canadian Northwest No. 1 hard Fyfe wheat I sent you. All letters received on this subject unanimously express but one opinion of the excellence and superior quality of the sample, and a desire to obtain such wheat in its original purity.

I am assured by several eminent authorities in Canada that this wheat can, and probably will, shortly be despatched from the Canadian Northwest, through Canadian territory only, to a Canadian port, and shipped direct to this country, and delivered here at a cost of about 35s. per quarter, or possibly less.

It is desirable that the farmers of the Canadian Northwest should be informed how highly the British and Irish millers think of this wheat, to induce them to increase the area of cultivation. With this object in view, may I beg you to allow me to publish your valuable letter, which I propose should appear with a number of others in "The Miller."

A large importation of this magnificent wheat would, I venture to think, be of permanent benefit to the millers of this country, as well as an incalculable advantage to our fellow-subjects in Canada.

Waiting the favour of your reply,—I remain, yours faithfully,

WILLIAM DUNHAM.

The object of publishing the valuable opinions of British and Irish millers is to enlist all possible sympathy with any movement whereby we may encourage the importation of Colonial produce by the trade here, and for the purpose of circulating the published opinions of some of the leading millers of the United Kingdom among the farmers of the Canadian Northwest, which is certain to act as an incentive and encouragement for them to increase their area for cultivation in the coming spring.

According to the Harvest Report of the Manitoba Department of Agriculture there has been an increase of acreage under wheat in that province last season over that of 1883, viz., 309,281 acres in 1884, as against 260,842 acres in 1883, an increase of 18 per cent. It is also estimated that there were 4,746,058 bushels available for exportation, out of a total yield of 6,205,620 bushels. We are informed that a syndicate has been formed in Canada which has instructed a gentleman to purchase the wheat direct from the farmers, and a large portion of the wheat purchased has already arrived in the granaries of Port Arthur, on the Western Canadian shore of Lake Superior, for spring shipment. It is also reported in the *American Elevator* of Jan. 15, that Mr. Ogilvie, a wealthy miller of Montreal, representing a wheat syndicate with a capital of \$4,000,000 has gone to Winnipeg for the purpose of arranging for the transportation of 2,000,000 bushels of wheat from Manitoba to Montreal.

Probably the sample of No. 1 hard Fyfe wheat sent to us was of the choicest quality that could be collected from last season's crop. The samples, however, of previous years were very similar and of the same character, and they all bear a striking resemblance in quality to the samples of wheat collected by our special reporter from the office of THE MILLER during his visit to Manitoba in 1880. The wheat is universally commended, and the millers of this country concur that it is desirable to place it on the corn markets as soon as possible. The wheat on arrival at the elevators is graded; the standards for the wheat of the country are by the latest reports announced to be: No. 1 hard spring wheat—Shall be red Fyfe wheat, containing not more than 10 per cent. admixture of softer varieties; must be sound, well cleaned, and weigh not less than 60 lbs. to the measured imperial bushel. No. 2 hard spring wheat—Shall be red Fyfe wheat, containing not more than 10 per cent. admixture of softer varieties; must be sound, reasonably clean, and weigh not less than 58 lbs. to the measured imperial bushel. No. 1 spring wheat—Must be

sound, well cleaned, and weigh not less than 60 lbs. to the measured imperial bushel. No. 2 spring wheat—Must be sound, reasonably clean, and weigh not less than 58 lbs. to the measured imperial bushel. No. 3 spring wheat—Shall comprise all wheat fit for warehousing, not class enough for No. 2, and weighing not less than 56 lbs. to the measured imperial bushel. Rejected spring wheat—Shall comprise all wheat fit for warehousing, but too low in weight or otherwise unfit for No. 3.

Millers have felt a very severe competition by reason of the influx of foreign flour. They, however, very well know the soundness of their position, and the superior advantages they already possess over the foreign miller, viz., the fact of their being located at the point of consumption, the ready market they have for their offals, and possessing always a good harvest at their ports.

Notwithstanding these favourable circumstances we think that every advantage should be taken by millers of opportunities constantly offering in the shape of new wheat fields. There can be no doubt that the period has now arrived when the completion of the Canadian Pacific Railway, which is expected to take place in May next, from Montreal to the Rocky Mountains, will at once place our millers in a far better position than heretofore. It would be to the interest of the Canadian Pacific Railway to encourage a through traffic for this wheat from points of production to the ports of Montreal and Quebec, and deliver direct into the ocean steamers, or during the winter months by rail to Halifax; the whole distance traversed would thus be through the Canadian dominion. The price of freight per bushel is estimated at 1s. from Winnipeg to Montreal. We are not informed if this rate is permanently settled, but it would clearly be to the interest of the railway company to permanently fix the rate as low as possible to ensure a through traffic.

The course of action pursued by the Minneapolis millers shortly after the erection of some of their large mills in appointing a wheat buyer in common, whose duty was to purchase wheat direct from the farmers of Minnesota, &c., we believe answered the desired end for some time. We now find in Canada that wheat syndicates are formed, and buyers are appointed to purchase the fine Canadian Northwest wheats, and we see nothing to prevent the millers of the United Kingdom forming syndicates for the same end, a line of action we think which would meet with success to all parties con-

cerned, as well as to unite in still closer bonds the loyal agricultural population of the Canadian Northwest to the Mother Country.

REPLIES.

Steam Flour Mills, Northam, Southampton, Jan. 27, 1885.

Dear Sir,—I am much obliged for your sample of No. 1 hard Fyfe wheat. I have used this class of wheat some years ago and found it a great improvement to the flour, and should therefore be very pleased if it can be again brought on the market at a reasonable price.—I am, dear sir, yours truly,
J. APPLEFORD.

Cleveland Steam Flour Mills, Stockton-on-Tees, Jan. 29, 1885.

Dear Sir,—I have examined the small sample of Canadian Northwest No. 1 hard Fyfe wheat which you were good enough to send me, and consider it a most valuable wheat for milling. I should be glad to get hold of a large line of this wheat on reasonable terms. For gradual reduction milling it will work up splendidly, giving a very large percentage of well-shaped semolina and middlings, samples of which please find enclosed. Anything you can do to introduce the wheat into this country will benefit the British and Irish millers, as well as forward the interests of our colony,—Yours very truly,
Per pro R. H. APPLETON,
H. MACDONNELL.

Steam Flour Mills, St. James's Road, Croydon, Jan. 20, 1885.

Dear Mr. Dunham,—We are in receipt of the sample of No. 1 hard Fyfe wheat from the Canadian Northwest, for which we are much obliged. It does recommend itself as great value from a millers' and bakers' point of view in all points. It is a real treat to possess a sample of such produce to gaze and dwell upon as a type of the perfect, for what it lacks we cannot see. What a future is before such a country! Again thanking you, we are, truly yours,
ASHBY, SON & ALLEN.
(F. ASHBY.)

Redcliff Back, Bristol, Jan. 13, 1885.

Dear Sir,—We have your circular and the sample. The quality of the wheat is very fine, and we should like to see a good supply of it on our markets. Thanking you for the sample.—Yours truly,
WILL. BAKER & SONS.

Ringsend Road Mills, Dublin, Jan. 26, 1885.

Dear Sir,—Yours and sample of No. 1 hard Fyfe wheat to hand, and I am much obliged for same. Wheat such as this sample would be very valuable to home millers (using rolls) for mixing, as it should give great strength to their flour, and good produce in baking. I would be very glad to get a constant supply of it here.—Yours truly,
P. BOLAND.

Duncrue Street, Dufferin Dock, Belfast, Jan. 26, 1885.

Dear Sir,—We have to acknowledge receipt from you of a sample parcel of hard Fyfe Canadian wheat. More desirable wheat for the British miller could not be found. It is simply magnificent.

You do much to enlighten our minds in your great journal, THE

MILLER, but there is no estimating the extent to which you would advance our material interests if you could succeed in opening up for us a direct communication with the regions where this article is grown. To the Canadian farmer, as well as the British miller, a Hudson Bay route would be invaluable. While not despising the Canadian railroad route, we think the other, for three or four months of the year, would be vastly superior for the economical handling and transfer of large quantities of this grain to British markets.

Wishing you much success in awakening the public of England and Scotland to the importance of this matter,—We are, yours truly,

D. & W. CARMICHAEL.

Steam Flour Mill, Deal, Jan. 17, 1885.

Dear Sir,—The sample of wheat of No. 1 hard Fyfe variety which you have kindly sent me, and of which you have asked my opinion, is, in my estimation, of very fine quality, and would sell freely as such if placed on the market. I have shown this sample to some of the leading factors on the London market, and they were all very pleased with it, and were anxious to know whence it came, and if it were for sale. If the wheat was not quite as hard as the sample (which probably it is not) I should like it better; but millers vary in opinion on such matters. Should this wheat come on the market, I shall be very pleased to have some of it, and feel quite certain it will sell well.—Yours truly,

G. W. CHITTY.

Albion Steam Flour Mills, Rotherhithe, London, S.E., Jan. 27, 1885.

Dear Sir,—I am much obliged for the No. 1 hard Fyfe Canadian Northwestern wheat that you sent me. You ask my opinion about the quality of it, which I do not feel quite competent to give, as I have never used any, but I should say, from the appearance of it, that it is just what we want in London.—I am, dear Sir, yours sincerely,

F. D. COLLEN.

Thames Tunnel Flour Mills, Rotherhithe, London, Jan. 27, 1885.

Dear Sir,—The sample of Canadian hard wheat you sent us is of very fine quality, and will do good in any flour. The natural weight must be very great, 66 or 67 lbs. per bushel if in such condition as sample.—Yours truly,

THOMAS & JAMES COWAN.

Phoenix Mills, Close Newcastle-on-Tyne, Jan. 13, 1885.

Dear Sir,—We are in receipt of your favour, also sample of No. 1 hard Fyfe wheat, with which we are very much pleased, and there can be no better quality of wheat used for mixing purposes than it is, both for strength and quality of flour produced, and length also.

Of the crop of 1877 we used a very large percentage of No. 1 Minnesota wheat to our perfect satisfaction in every respect, a small sample of which we enclose you, and we have an opinion that the sample of Fyfe is superior to it.—Yours truly,

JOHN DAVIDSON & SONS.

Marsh Mills, Plympton, Devon, Jan. 15, 1885.

Dear Sir,—Your circular and sample of No. 1 hard Fyfe wheat are duly received.

The quality of the wheat is very fine, and it would prove invaluable to millers in this country, where home-grown wheats frequently come to hand in damp condition in consequence of the humidity of the climate. The

extent of the demand would of course largely depend on the price, but it would probably find ready buyers at some shillings over No. 2 red winter.
—Yours faithfully,
R. HARVEY DAW.

Burghfield Mills, Reading, Jan. 13, 1885.

Sir,—I have to thank you for kindly sending me a sample of No. 1 hard Fyfe wheat. In my opinion it is one of the finest samples of wheat I have ever seen for mixing with English; the difficulty is we can't get it. If you, Mr. Editor, can put us in the way to get a continuous supply of this same quality the trade will be ever grateful to you. I will let my son crush a small quantity and analyse it, and, when done, I will with pleasure send you his result. But without doing that, any miller would say there is abundance of strength and plenty of colour.—Again thanking you for the sample, I remain, yours truly,
JAMES DEWE.

Crayford Flour Mills, Crayford, Kent, Jan. 14, 1885.

Dear Sir,—The sample of hard red Fyfe wheat you so kindly sent me arrived by last night's post. I consider it of splendid quality, and there can be no question as to its value for mixing with English wheat, but the question is, how are we to get a regular supply of it? If you can put us in the way of doing so you will be conferring a great boon on us poor English millers. I am afraid the American millers are too 'cute to allow this quality to come here in any quantity if they can possibly prevent it.—Hoping you have some scheme in view by which it may be accomplished, I am, dear Sir, yours truly,
THOS. DOWNING.

Abbey Mills, Reading, Jan. 13, 1885.

Dear Sir,—We have examined the sample of wheat from Canadian Northwest you so kindly sent us. We consider the wheat some of the finest quality we have seen for a long time. The colour is good; large proportion of gluten of a very fine quality. If such wheat can be put on our markets at a reasonable price it must meet a ready demand at 3s. to 4s. per qr. over the best Indian red wheats. With thanks for your kindness,—Yours truly,
EISDELL & SOUNDY.

The Cobden Flour Mills Co., Limited, Wrexham, Jan. 14, 1885.

Dear Sir,—The sample of No. 1 hard Fyfe wheat to hand. I consider it would be a very useful wheat for mixing purposes in this country, and no doubt if it would come at a reasonable price, and come regularly, it would be generally used.—Yours truly, for the company,
J. GAUNT, *Manager*.

Town Mills, Kidderminster, Jan. 26, 1885.

Dear Sir,—The sample of Canadian wheat you sent us we consider of good quality, clean, and useful for mixing with English wheats; but although it may give strength, we consider bread made from it will not be very good quality.—Yours truly,
D. W. GOODWIN & Co.

Hilton Corn Mill, near Derby, Jan. 22, 1885.

Dear Sir,—Your sample of wheat to hand, but owing to my being away from business through ill-health I did not reply. The wheat is very good and "what's wanted." Thank you very much for your sample. I had a sample sent me two years ago from a friend farming in Dakota.—Yours truly,
T. C. GREENSMITH & Co.

Greenock, Jan. 15, 1885.

Dear Sir,—Your letter and sample of wheat reached me in due course. The wheat is beautiful, and first-class in quality, worth here at present 39s. per 480 lbs. No doubt it would do for mixing in some districts, but here I would most certainly grind it alone, and it would make flour of the *finest* quality. Please to accept my thanks for your thoughtfulness, kindness, and attention.—I remain, yours truly,

MATTHEW HILL.

Leicester, Jan. 16, 1885.

Dear Sir,—I am obliged by yours with sample of No. 1 hard Fyfe wheat from Northwest Canada. It agrees with sample I have received from friends in Manitoba. I think it an extremely valuable wheat for milling, containing both colour and strength, and would, I should say, improve the quality of any flour now being made in this country. But I fear the price will prevent a free use of it.

Should the proposed route from Northwest Canada *via* Hudson's Bay be carried through, bringing that district as near Liverpool as New York, there may be some chance of the wheat from that district finding its way here. I shall be glad to welcome it.—I am, dear Sir, yours truly,

M. HITCHCOCK.

Gimmers Mill, Haddington, Jan. 15, 1885.

Dear Sir,—I am obliged to you for the sample of Fyfe wheat from the Northwest. It is a very fine sample. By mixing a proportion of this with other wheat an element of strength should be introduced in most cases, and with many other kinds of wheat; but it is high priced, and is already in great demand, and there are other kinds of wheat not so much run after which give as good results. For instance: 2 Calcutta (2 club), 1 Kubanka, 1 Californian, 2 Home, makes a good mixture.

Then apart from this there is the question of the expediency of mixing such a hard wheat with soft home wheat. Certainly it is no harder than Kubanka in the mixture given above, yet it seems to have the characteristic not to assimilate readily, and to get full justice wants a mill plant for itself.—I am, yours faithfully,

ALEX. HOGARTH.

Britannia Mills, Sheffield, Jan. 26, 1885.

Dear Sir,—We have examined the Canadian wheat you have favoured us with, and have no doubt it would make flour of an excellent quality, especially with rollers.—Yours truly,

H. & W. UBBOTSON.

Tadcaster, Jan. 26, 1885.

Dear Sir,—I beg to acknowledge the receipt of the No. 1 hard Fyfe wheat per parcel post, and to thank you.

The sample is very good, and a class of wheat very desirable for mixing with our fine English wheat. I only wish we had a regular supply. After my return from America (with the millers' party) I imported some similar wheat, which worked very well indeed with my *then* new roller mill. Have not been able to have any since, the cost of railway freight to New York was so much, that the cost to me was rather over a market price. If shipped at a more favourable port in Canada, it would find a ready market amongst our Yorkshire millers.—Yours truly,

J. A. INGLEBY & SONS.

Old Mills, Boroughbridge, Jan. 15, 1885.

Dear Sir,—We thank you for sample of Canadian wheat, which we think is of magnificent quality and would be highly valued by English millers. We should be glad to have wheat so clean and of such strength and quality offered to us.—Yours truly,
LOFTHOUSE & HAMMOND.

Inver Mills, Larne, Jan. 17, 1885.

Dear Sir,—We thank you for sample of Scotch Fyfe wheat. We consider it 3s. per qr. better than No. 1 Duluth for *mixing* purposes, and 5s. per qr. for *special* purposes. We find no difficulty in manufacturing a flour to supersede "Pillsbury's Best." The general opinion expressed about your sample here is—"unobtainable."—We remain, dear sir, yours faithfully,
ROBERT MACAULAY & SON (EDWARD COOPER.)

Ibrox Flour Mills, Glasgow, Jan. 14, 1885.

Dear Sir,—I thank you for the sample of No. 1 hard Fyfe wheat from Northwestern Canada which you have been so kind as to send me.

This variety of wheat, from the States, we are in the habit of milling alone here without any other mixing beyond what it gets before it reaches our hands. It is seldom or never that we see a lot of wheat in bulk as fine as your sample. Could we get such quality regularly we should have no fear of any American competition in point of quality of flour.

For mixing purposes the wheat would be most valuable, in my opinion. Our bakers prefer to get their Minnesota flours pure, and to do their own mixing.—Yours truly,
JAMES MARSHALL.

Groves Steam Flour Mills, Lime Street, Hull, Jan. 27, 1885.

Dear Sir,—We have examined the sample of wheat, "hard Fyfe," you sent us. It appears very similar to the "Duluth" grain, and we have also consulted with others on our market. We think it a very fine quality indeed. It is certainly a very choice sample, and we shall be glad to do anything further for you if you wish it.—Yours, &c.,

W. MARSHALL & SON.

East Mills, Colchester, Jan. 29, 1885.

Dear Sir,—In reply to your enquiry respecting an opinion of the sample of Manitoba wheat sent us, we have carefully examined it, and we consider it to be of unusually fine quality; in fact for roller millers it is the best wheat we have seen, the quality is magnificent, and it is hard and very clean and sound, with an unusual absence of cockle, and looks very strong, but we have only judged by its appearance.—We are, yours faithfully,
E. MARRIAGE & SON.

Steam Flour Mills, 97 and 99, Lots Road, Chelsea, London,
Jan. 29, 1885.

Dear Sir,—We thank you for the sample of Canadian Northwest No. 1 hard Fyfe wheat. We feel sure that if our friends send us this wheat at the right price, we shall be able to make flour quite equal in price and quality to any manufactured in America. It is a very fine sample, and no doubt the product will be excellent.—We are, yours truly,

EDWARD MEAD & CO.

West Gore Street Mill, Salford, Jan. 29, 1885.

Dear Sir,—I have examined the sample of Canadian No. 1 hard wheat you sent. It appears to be splendid healthy grain, very even and clean, and strong. With regard to the colour of the flour, the quantity you sent is hardly sufficient to make a reliable test. This wheat would be a valuable addition to the resources of the English miller.—Yours respectfully,

Per pro F. Moss,
F. Moss, Jun.

Steam Flour Mills, Ship Street, Brighton, Jan. 17, 1885.

Dear Sir,—I am very much pleased with the look of your hard Fyfe wheat from Canada. It would be very useful for mixing if it came cheap enough, say 36s. per qr.—Yours truly,

FREDK. NAPPER.

Bickton Mills, Fordingbridge, via Salisbury, Jan. 30, 1885.

Dear Sir,—I am much obliged to you for the sample of No. 1 hard Fyfe wheat, and have examined it. I should think it a most valuable wheat for mixing with English wheat and also for using by itself, the latter more especially in a pure roller mill, where, I should think, it would make a large percentage of high class patent flour. The sample you have sent me I shall sow as spring wheat and shall hope to get sufficient to be able to test the quality in flour after having grown one season in this country, and will let you know the result; and again thanking you for the sample,—I am, yours truly,

W. A. NEAVE.

Gravesend, Jan. 27, 1885.

Dear Sir,—I have received the sample of No. 1 Fyfe wheat of which you had advised me, and I thank you for giving me a sight of the quality grown in the northwest of Canada. It is the finest and cleanest that I have seen from that country, and would be valuable in the English markets; probably it would have brought 39s. per qr. of 496 lbs. in the Corn Exchange yesterday, which was about the value of the best English white wheat, weighing about 65 lbs. per bushel. I will carefully keep the sample and show my friends how some wheat is grown in that far distant country. Again thanking you for the compliment in sending it to me,—Believe me, yours very truly,

F. B. NETTLEINGHAM.

Eagle Flour Mills, Snow Hill, Birmingham, Jan. 19, 1885.

Dear Sir,—Please accept my best thanks for the sample of No. 1 hard Fyfe wheat. It is a grand sample; for mixing in a blend for best flours it is just what we want, and what we cannot buy. The value and quality of Manitoba wheat, of this grade in particular, lies in the fact that it is grown on almost virgin soil. Makers of best flour are, or should be, anxious, as far as they can, to get their supplies of wheat that they depend upon for *strength* from those parts of the Northwest of America where wheat is a new crop for the land. No. 1 Duluth is not in any way fit to compare with the sample sent, especially not in its working qualities. I should be glad if you could let me know where I could buy such; and if none has been imported in any quantity I hope our merchants will buy such to ship to England. It would be much appreciated, and, for one, I should be glad to buy at a good price. It is just the wheat I want.—Yours faithfully,

J. H. PARKES.

Usk Shore Flour Mills, Newport, Monmouthshire, Jan. 27, 1885.

Dear Sir,—I am favoured with your sample of No. 1 hard Fyfe wheat grown in the Northwest of Canada, and only wish that a good bulk of it were immediately available for converting into flour in this country. In quality, character, and condition it in every way sustains the eloquent description of the fertility of the soil given by the late Governor-General Lord Dufferin, when on his vice-regal tour through that district. If such wheat were sent us in quantity it would be invaluable for mixing purposes. I am glad to see the imports of flour declining, and I hope the day is not very distant when, by conversion of all our mills to the newest systems, we shall, as a whole, produce an article that cannot be excelled, and so stop foreign flour coming in upon us in any serious quantity. With the great variety of wheats from every corner of the globe now available in this country, and at the minimum of values, I have every confidence in the future of "the trade," and believe that with the best appliances for milling we shall yet beat the world. Thanking you for courtesy in sending me the sample,—I remain, yours truly,

H. J. PARNALL.

Whitechurch Flour Mills, Reading, Jan. 15, 1885.

Dear Sir,—I am in receipt of your sample of No. 1 hard Fyfe wheat, and judging from the look of it, should think it a very desirable quality to have on the market to mix with our local wheats, especially when we have a wet harvest.—Yours truly,

P. O. PAYZE.

Buckden Mills, Huntingdon, Jan. 21, 1885.

Dear Sir,—I beg to thank you for a fine sample of Canadian wheat, 1884 crop. The quality is certainly very good all round—the class of wheat highly suitable for rollers. Regret not replying to your letter earlier; have been from home.—Yours truly,

W. PRIESTLEY.

Centre Street Flour Mills, Glasgow, Jan. 13, 1885.

Dear Sir,—We thank you for favouring us with the sample of Canadian Northwest wheat; it is very beautiful wheat. We will get it tried as far as we can test by the wheat, and will be glad to have a trial by the rollers as soon as we can lay our hands on it, as, if the price is suitable, we think it is a wheat that would do for a flour of which we go through a large quantity.—Yours truly,

WM. PRIMROSE & SONS.

29, Brook Street, Macclesfield, Jan. 28, 1885.

Dear Sir,—I have to thank you for a sample of last season's wheat of the Fyfe variety, and grown in the Canadian Northwest, which came safely to hand. I am very much pleased with it; it is indeed of very fine quality, and just what the English miller is now short of. If a good supply of such quality can by any means be secured for our use, I am sure it would place us in a very much better position to hold our own against the fierce competition we have now to contend with. I should say a more important subject could not possibly be taken up by the National Association of British and Irish Millers, and I shall be very glad to hear that a move has been made in the matter. The following I copy from the *American Miller* (present month):—"Why English millers cannot compete.—The English get very little, if any, of the hard "American No. 1 winter or spring wheat, most of it being made into flour "in America, and consequently their flour is made from the soft grades of

"American wheats mixed with other wheats, and cannot compete with the "straight flour made from hard wheats in America, and aged by its journey "to England." Something is added about their superior machinery, which is not worth notice, for I am quite sure we have, and shall have, as good machinery as any country in the world.

I remain, dear Sir, yours very truly,
C. REDWOOD.

City Flour Mills, Gloucester, Jan. 26, 1885.

Dear Sir,—We have your sample of No. 1 Fyfe wheat to hand this morning, for which we thank you. A friend of ours brought us a sample direct a few weeks ago representing the same quality as yours. As to its excellence and usefulness for mixing purposes there can be but one opinion. If *freely* offered on our markets it will find a *free* demand.

We are, dear Sir, yours respectfully,
REYNOLDS & ALLEN.

Fishergate Flour Mills, Doncaster, Jan. 26, 1885.

Dear Sir,—We have to-day received the sample of No. 1 hard Fyfe wheat grown in the Canadian Northwest, with which we are much pleased, and have little doubt that if it can be shipped to this country in quantity, and equal in bulk to the sample you have so kindly sent us, it will be very extensively used by English millers for mixing with our native and similar wheats.—Respectfully yours,

ROBINSON & HANLEY.

Union Mills, New Wortley, near Leeds, Jan. 27, 1885.

Dear Sir,—I should think the No. 1 Hard Fyfe wheat, sample of which came to hand yesterday, a first-class wheat for mixing, of great strength, and very suitable for bakers, but I have not used it yet.—I am, sir, yours faithfully,

JOSEPH SHACKLETON.

Nottingham Road Flour Mills, Derby, Jan. 15, 1885.

Dear Sir,—Yours to hand, also the sample of red Fyfe wheat. I hardly know what you wish me to say about it, as I think it must be so patent to every miller that (on rolls especially) it is one of the best sorts of wheat grown, combining as it does both strength and colour. All the introduction necessary for it will be to place it on the stands at Mark Lane and Liverpool at a fair price.—Yours truly,

A. SMITH.

Victoria Corn Mills, Sheffield, Jan. 26, 1885.

Dear Sir,—I beg to thank you for sample of Canadian wheat received. It is of very fine quality, and will no doubt yield a superior quality of flour.—I am, yours truly,

SAMUEL SMITH.

Holbeck, Leeds, Jan. 27, 1885.

Dear Sir,—I received your sample of wheat, and I think it would make a good mixing wheat, as it seems to have plenty of strength. It is very even and clean.—Yours respectfully,

S. SMITH.

Flour Mills, Barrow-in-Furness, Lancaster, Jan. 20, 1885.

Dear Sir,—The sample of No. 1 hard Fyfe wheat came safely to hand, I consider it would be a most desirable mixing wheat for English millers,

particularly in roller mills. We should value it above any wheat at present on the market in Liverpool. What prospect is there of any importation of it?—Yours obediently,
WILLIAM SMITH.

Steam Flour Mills, West Bute Docks, Cardiff, Jan. 19, 1885.

Dear Sir,—We are duly in receipt of yours and sample of No. 1 hard Fyfe wheat. The quality is unquestionably very fine, and will class with the highest grades of American wheat for strength, &c., and be most useful for mixing purposes. The question comes whether this wheat can be procured without mixture in sufficient quantity to bring value within reach of the English miller. If it can we should like to hear from some respectable shipper thereon. Thanking you for sample,—Yours faithfully,
SPILLER & CO.

Nayland, Colchester, Jan. 17, 1885.

Dear Sir,—I am obliged by the sample forwarded of No. 1 hard Fyfe Canadian Northwest wheat. It is undoubtedly of a very superior quality, and particularly adapted to improve the quality of any flour made in this country, especially if mixed with wheat of English growth.—Yours, &c.,
J. STANNARD.

Brighouse, Yorkshire, Jan. 26, 1885.

Dear Sir,—Both circular and sample duly to hand, and we thank you. The wheat is nice quality, and of great strength.—Yours truly,
for THOS. SUGDEN & SON, T. S.

Hayle, Cornwall, Jan. 14, 1885.

Dear Sir,—In reply to your letter, we are much obliged for sample of No. 1 Fyfe hard wheat to hand this day. It looks very fine indeed, and we should say would make very prime flour under the roller system. Are there any means of getting, say, 50 or 100 qrs. of it as a trial lot? And what is about its value c.i.f. London, Liverpool, or Bristol? We should much like to give it a trial.—Yours faithfully,

J. H. TREVITHICK & SONS.

Fole Mills, near Uttoxeter, Jan. 28, 1885.

Dear Sir,—I have examined the sample of No. 1 hard Fyfe red wheat from Canada sent by you, and find it a very strong, dry wheat, full of gluten, and it appears an excellent substitute for certain kinds of Russian wheat now used for mixing purposes, particularly with soft English and some sorts of Indian wheat. In gradual reduction mills it will be valuable, making a large percentage of semolina and middlings. The yield in a small baking trial is good, being $1\frac{1}{2}$ lbs. of bread to 1 lb. of flour, and very light and elastic in texture. If it can be supplied at a price not exceeding that of American red winter or fine spring, I anticipate a considerable demand.—Yours faithfully,
WM. VERNON.

Northampton, Jan. 31.

Sir,—We have received the sample of wheat and find quality very fine and it is a good mixing wheat for English millers. Such wheat would find a good market here.—Yours truly,
JOS. WESTLEY & SONS.

107, King Street, Aberdeen, Jan. 16, 1885.

Dear Sir,—I duly received your circular and have received the sample of the hard Fyfe wheat, which certainly is as beautiful wheat as ever I

saw, and particularly well adapted for millers in this country. It would be a very great service if some means could be found by which the millers of this country could get access to the growers of these wheats, who seem to complain bitterly of the way in which they are handled on the other side. Surely some agency can be devised for getting more easy access to these hard wheats, which are never seen in commerce in purity.—I am, yours very truly,

JOHN F. WHITE.

Sheaf Steam Corn Mills, Sheffield, Jan. 27, 1885.

Dear Sir,—Your sample of the Canadian wheat to hand, and if the English miller could only get a good supply of such wheat at a moderate price, fine Hungarian flour would stand little chance in this country. The sooner you introduce it the better.—Yours respectfully,

JOSHUA WIGFULL & SONS.

In thanking our correspondents for their courtesy we should add that we have been requested to consider a large number of letters, although favourable, as confidential. A number also of very important letters arrived too late to enable us to obtain the necessary permission to publish them.



CANADIAN NORTHWESTERN WHEAT.

In our last Technical Issue we published a number of replies, which were continued in our Market Supplement, from millers in the United Kingdom to a circular accompanying a sample of No. 1 hard Fyfe wheat grown in the Northwest of the Dominion of Canada. Our object in sending the wheat was fully explained in the circular, and it will have been seen by the replies we published that that object was thoroughly realised. From the physiological and chemical character of the wheat we knew that it would be welcome to our millers for flour-making purposes, a fact which has been fully confirmed by the replies we have received. The first reply we published was from Mr. R. H. Appleton, ex-President of the National Association of British and Irish Millers, Cleveland Mills, Stockton-on-Tees, who says he should be "glad to get hold of a large line of this wheat "on reasonable terms. For gradual reduction milling it will work "up splendidly, giving a very large percentage of well-shaped semolina and middlings." Mr. F. Ashby, of Messrs. Ashby, Son and Allen, Steam Flour Mills, St. James's Road, Croydon, says "the wheat recommends itself as great value, from a miller's and baker's point of view, in all points. It is a real treat to possess a sample "of such produce, to gaze and think upon as a type of the perfect, for "what it lacks we cannot see." Messrs. Wm. Baker & Sons, Redcliff Back, Bristol, well known as eminent millers, say "the quality "of the wheat is very fine, and we should like to see a good supply "of it on our market." Mr. P. Boland, Ringsend Road Mills, Dublin, says: "Wheat, such as this sample, would be very valuable to "home millers (using rolls) for mixing, as it would give great strength to "the flour and good produce in baking." Messrs. D. & W. Carmichael, Dunerue Street, Dufferin Dock, Belfast, say "more desirable wheat "for the British miller could not be found. It is simply magnificent." Messrs. John Davidson & Sons, of the Phoenix Flour Mills, Newcastle-on-Tyne, say "there can be no better quality of wheat "used for mixing purposes than it is, both for strength and quality

"of flour produced, and length also." Messrs. Eisdell & Soundy, Abbey Mills, Reading, one of the proprietors of which is the President of the National Association of British and Irish Millers, say: "We consider the wheat some of the finest quality we have seen for a long time. The colour is good; large proportion of gluten of a very fine quality. If such wheat can be put on our market at a reasonable price, it must meet a ready demand at 3s. to 4s. per quarter over the best Indian red wheat." Mr. Gaunt, manager of the Cobden Flour Mills Co., Limited, Wrexham, says: "I consider it would be a very useful wheat for mixing purposes in this country, and no doubt if it would come at a reasonable price and come regularly, it would be generally used." Mr. Hitchcock, Leicester, says: "I think it an extremely valuable wheat for milling in this country, containing both colour and strength, and would, I should say, improve the quality of any flour made in this country." Messrs. Mead & Co., Steam Flour Mills, Chelsea, London, say: "We feel sure that if our friends send us this wheat at the right price, we shall be able to make flour quite equal in price and quality to any manufactured in America. It is a very fine sample, and no doubt the product will be excellent." Mr. Redwood, manager of Mr. Fitton's mill, Macclesfield, referring to the wheat, says: "I am very much pleased with it; it is indeed of very fine quality, and just what the English miller is now short of. If a good supply of such quality can by any means be secured for our use, I am sure it would put us in a much better position to hold our own against the fierce competition we have now to contend with." Mr. Samuel Smith, Victoria Mills, Sheffield, an ex-President of the National Association of British and Irish Millers, referring to the sample he received, says: "It is of very fine quality, and will no doubt yield a superior quality of flour." Messrs. Joshua Wigfull & Sons, Sheaf Mills, of the same place, say: "If English millers could only get a good supply of such wheat at a moderate price, fine Hungarian flour would stand little chance in this country." Messrs. Robinson & Hanley, Fishergate Flour Mills, Doncaster, in reference to the sample we sent them, say "they have little doubt that if it can be shipped to this country, and equal in bulk to the sample, it will be very extensively used by English millers for mixing with our native and similar wheats." The English and Irish millers whose opinions we have quoted are representatives in the trade, and we might add a number more

equally favourable. However, we may add a few of those from Glasgow and other Scottish millers, because in that country American competition has been as severe as it has been in any part of the United Kingdom. Mr. Marshall, of Ibrox Flour Mills, Glasgow, for example, says, "could we get such a quality regularly we should have no fear of American competition in quality of flour." Mr. Hill, Greenock, says "the wheat is very beautiful and first-class in quality, worth here at present 39s. per 480 lbs. No doubt it would do for mixing in some districts, but here I would grind it alone, and it would make flour of the *finest* quality." Greenock is not far removed from Glasgow, and the Glasgow millers, as we stated in our last Technical Issue, find it to their advantage to grind their wheats singly, as the bakers prefer blending the flour themselves. This is no doubt the reason that Mr. Hill would grind the Northwestern Canadian wheat alone, making, as he believes it would, flour of the *finest* quality. The italics are Mr. Hill's. Mr. Marshall, of Ibrox Mills, Glasgow, whose opinion of the wheat we have stated above, says: "This variety of wheat from the States we are in the habit of milling alone here, without other mixing beyond what it gets before it reaches our hands. Our bakers prefer to get their Minnesota flour pure, and to do their own mixing," a fact which corroborates what we said in our last impression. Mr. John F. White, Aberdeen, another eminent Scottish miller, says: "I have received the sample of hard Fyfe wheat, which certainly is as beautiful wheat as I ever saw, and particularly well adapted for millers in this country. It would be a great service if some means could be found by which the millers of this country could get access to the growers of these wheats, who seem to complain bitterly of the way in which they are handled on the other side. Surely some agency can be devised for getting more easy access to these hard wheats, which are never seen in commerce in their purity."

It will have been seen by those who have read the replies which the reception of these samples of No. 1 hard Fyfe wheat have elicited from our correspondents, that the question how to get access to the product is the emphatic burden of their song. The answer may be found in the opening of the Canadian Pacific Railway. Hitherto passengers on landing at Quebec from this country, prior to the opening of navigation on the lakes, have been compelled to go to Manitoba by way of the United States, making a long detour to the South. It is now announced, however,

that the Canadian all-rail route along the North shore of Lake Superior is expected to be completed and opened for traffic early this spring, allowing through trains over the Canadian Pacific Railway from Quebec and Montreal to Manitoba, and as far into the Rocky Mountains as the Selkirk Range. Accordingly they will be able to proceed direct to their lands by train from Montreal without change. The completion and opening of this line will, as a matter of course, greatly facilitate the population of these wheat lands with the right sort of people to promote their cultivation, so that a large supply of the cereal so greatly desiderated by the British and Irish millers can be depended on coming directly from the harvest fields of the Canadian Northwest to Liverpool and other ports of the United Kingdom. In noticing this wheat in our issue of February the 2nd we said: "It would be to the interest of the Canadian Pacific Railway to encourage a through traffic for this wheat from points of production to the ports of Montreal and Quebec, and deliver direct into the ocean steamers, or during the winter months by rail to Halifax; the whole distance traversed would thus be through the Canadian Dominion. We now find in Canada that wheat syndicates are formed and buyers are appointed to purchase the fine Canadian Northwest wheats, and we see nothing to prevent the millers of the United Kingdom forming syndicates for the same end, a line of action, we think, which would meet with success to all parties concerned, as well as unite in still closer bonds the loyal agricultural population of the Canadian Northwest to the Mother Country." It is, or at all events it used to be, a characteristic of the English people that when they knew in what part of the world a production was that they wanted, they immediately took the most effective steps in order to secure it. When it was discovered that gold was to be had for the digging in California and Australia, Englishmen secured their full share of it from both those countries; and now that they know that the best raw material for the manufacture of flour can be had in the Northwest of Canada, one of our colonial possessions, English enterprise will be very much degenerated indeed if it does not get a fair and reasonable supply of that splendid wheat. Our millers have abundance of gold, and they have plenty of intelligence and determination to organise syndicates which will make the Northwestern Canadian wheat flow to our shores in such quantity as shall knit the bond of union still more closely between our colonial brothers and the Mother Country. The Canadian Pacific Railway

Company naturally desire to people those rich growing wheat regions with tillers of the soil, so that they may yield abundance of that fine produce for shipment to all parts where there is a demand for it. That there will be a great demand for it here we have shown by the replies we have published to the circular and the samples we have sent to the millers of this country; and when the railway referred to is completed and in proper working order, the policy of the directors should be based upon the adoption of an irreducible minimum of freights, so that the very wide-awake citizens of the United States do not contrive to ship their Dakota and Minnesota spring wheat cheaper to the extent of one cent. The company propose to carry wheat from Winnipeg to Montreal at the rate of one shilling per bushel, and if this rate is not finally and permanently fixed, it must not exceed what the company can carry for at the barest possible profit. This will, no doubt, be the policy on which the rate of carrying wheat and other merchandise will be permanently fixed. The province chiefly interested is still in its infancy, and those who have to do with the promotion of its growth should aim at giving its inhabitants every possible advantage. That there is a great future before Manitoba and the Northwest of our Canadian Dominion there is no room for reasonable doubt, and we sincerely trust that the millers of the United Kingdom will be largely instrumental in contributing to its greatness.

